Bureau of Land Management, Roswell Field Office
Environmental Assessment Checklist, DOI-BLM-NM-P0100-2009-55-EA
Juan Largo Pipeline & Drinkers

Resources	Not Present on Site	No Impacts	May Be Impacts	Mitigation Included	BLM Reviewer	Date
Air Quality			X	X	/s/ Michael McGee	3/16/09
Soil			X	X		
Watershed Hydrology			X	X		
Floodplains	X					
Water Quality - Surface			X	X	SWA Spec/Hydro.	
Water Quality - Ground			X	X	/s/ Michael McGee Geologist/Hydrologist	3/16/09
Cultural Resources	X				/s/Rebecca L. Hill 09-R-047A	25Feb2009
Native American Religious Concerns	X					
Paleontology	X				Archaeologist	
Areas of Critical Environmental Concern	X				/s/J H Parman Plan & Env. Coord.	2/10/09
Farmlands, Prime or Unique	X					2/25/09
Rights-of-Way			X	X	Realty /s/Sanderford	
Invasive, Non-native Species			X	X	/s/ Kyle Arnold	2/17/2009
Vegetation			X	X		
Livestock Grazing			X	X	Range Mgmt. Spec.	
Wastes, Hazardous or Solid	X				*/s/ Al Collar* HMS/ EPS	3/30/09
Threatened or Endangered Species	X					
Special Status Species	X				/s/ Randy Howard	2/17/2009
Wildlife		X				
Wetlands/Riparian Zones		X			Biologist	
Wild and Scenic Rivers	X					
Wilderness	X					
Recreation		X			/s/Bill Murry	2/27/09
Visual Resources		X				
Cave/Karst		X			Outdoor Rec. Plnr.	
Environmental Justice		x			*/s/ Richard Hill*	3/18/09
Public Health and Safety		x			Env .Prot. Spec.	
Solid Mineral Resources		x			/s/ Jerry Dutchover Geo/SPS	03/11/09
Fluid Mineral Resources		X			/s/John S Simitz Pet Engr/Geo	2/4/09

FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD

Juan Largo Pipeline, Water Development & Construction, **DOI-BLM-NM-P010-2009-55-EA**

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action and alternatives will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

DECISION: It is my decision to authorize the construction of 2.2 miles of water pipeline that will be placed on public land to provide adequate water supply on allotment #63036, Juan Largo.

Location of pipeline is as follows:

Juan Largo Pipeline T. 05 S., R.17 E., Sec. 11, 13 & 18.

All in Lincoln County, New Mexico, New Mexico Principle Meridian. (Please refer to map in Environmental Assessment.)

Actual construction of the pipeline will be done by the BLM. BLM will also supply the materials. Construction is normally accomplished during the summer months, June through September. The surface protection procedures and specifications set forth in the proposed action have been incorporated into the Environmental Assessment. Any comments made to this proposed action were considered and addressed.

Rationale for Recommendations: The proposed action and alternatives would not result in any undue or unnecessary environmental degradation. The proposed action and alternatives will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

In accordance with 43 Code of Federal Regulations, Part 4100, Sec 4160.2, any applicant, permittee, lessee or other affected interests may protest this proposed decision in person or in writing to the authorized officer, within 15 days after receipt of this decision. Please be specific in your points of protest.

The protection procedures for the proposed action are included in the Cooperative Agreement and are attached as stipulations. Any additional mitigation measures identified for the proposed action in the environmental impacts section of the attached environmental assessment have been formulated into stipulation. This decision incorporates by reference, the attached stipulations.

In the absence of a protest, this proposed decision will become the final decision without further notice. Any person who is adversely affected by the final decision of the authorized officer may file a written appeal to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after the decision becomes final is provided in which to file an appeal and a petition for stay of the decision in this office (43 CFR ‘4160.3 [c] and ‘4160.4).

/s/ Brad Pendley 04/02/09

Brad Pendley, Date

Assistant Field Manager, Resources

ENVIRONMENTAL ASSESSMENT

for

Juan Largo Pipeline and Drinkers

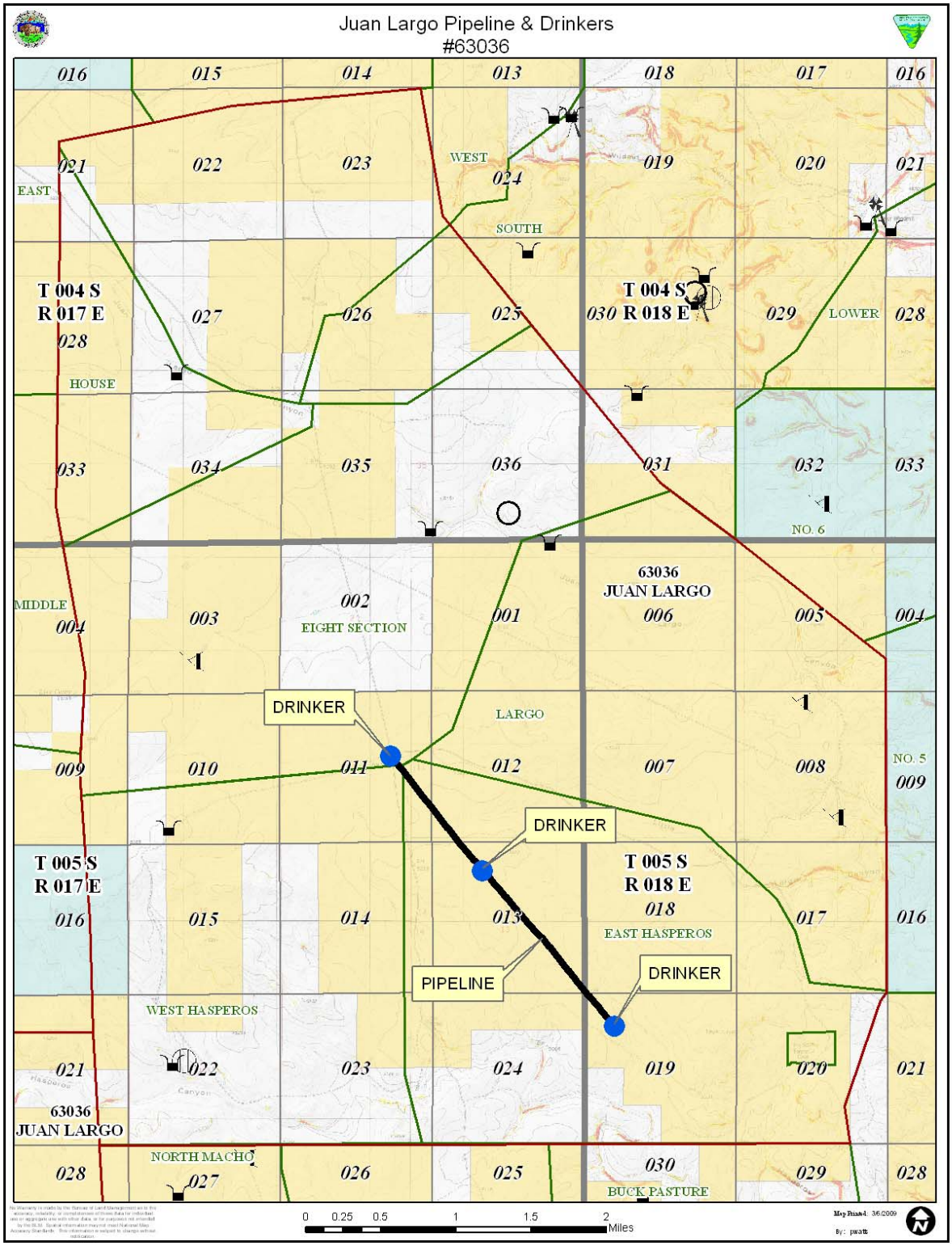
DOI-BLM-NM-P010-2009-55-EA

Locations:
Township 5 South, Range 17 East
Portions of: Sections 11, 13 & 18

NMPM

April 2009

U.S. Department of the Interior
Bureau of Land Management
Pecos District
Roswell Field Office
Roswell, New Mexico


Juan Largo Pipeline & Drinkers
#63036
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EAST
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MIDDLE
EIGHT SECTION
LARGO
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EAST HASPEROS
WEST HASPEROS
NORTH MACHO
BUCK PASTURE
DRINKER
DRINKER
DRINKER
PIPELINE
0 0.25 0.5 1 1.5 2 Miles

I. INTRODUCTION

Need For the Proposed Action

The need for the proposed action is to provide a reliable water source for East Hasperos Pasture on Juan Largo allotment #63036 by the installation of a water pipeline and drinkers connecting to an existing well. The pipeline construction will be approximately 2.2 miles of buried 1 ¼" (200 psi) pvc pipeline within East Hasperos Pasture of allotment #63036. BLM will install this pipeline.

Conformance with Land Use Plans: The proposed activity is addressed as part of the Roswell Resource Management Plan (October, 1997).

Relationship to Statues, Regulations, or Other Plans: The construction of pipelines and water developments as range improvements, either under Cooperative Agreement or Range Improvement Application is addressed under the 43 Code of Federal Regulations, Parts 4100, Grazing Administration, Exclusive of Alaska., Subpart 4120.3

Other Statues, Regulations or Plans are:

The Taylor Grazing Act of 1934, as amended (43 U.S.C. 315 (a)-(r))
The Federal Land Policy and Management Act of 1976, as amended (Pub. L. 94-579, 43 U.S.C. 1702 et seq), Sections 302 (a) & (b), Section 502 (a) & (c)
The Public Rangelands Improvement Act of 1978, as amended (Pub. L. 95-514, 43 U.S.C. 1901 et seq),
The National Environmental Policy Act of 1969, as amended (Pub. L., 91-190, 42 U.S.C. 4321-4347) Sec. 101

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The proposed action is the construction of approximately 2.2 miles of buried water pipeline all crossing public land, within East Hasperos Pasture of allotment #63036 in order to provide consistent and reliable water distribution. The location of the proposed water development is T.05S, R.17 E, Portions of Sections 11, 13 & 18, Lincoln County, New Mexico Principal Meridian.

The pipeline would be completely on public surface and be constructed under a Cooperative Range Improvement Agreement. The pipeline system would be installed using standard construction methods.

No new roads would be authorized as a part of this project for construction or maintenance. No blading would occur on public land, unless authorized by the Authorized Officer. Brush would be cleared by hand with hand tools. Vegetation, soil

and rocks left as a result of construction or maintenance activity would be randomly scattered over the project area and would not be left in rows, piles or berms, unless otherwise approved by the Authorized Officer. A berm would be left over the ditch line to allow for settling back to grade.

Water would be provided yearlong to drinking troughs located on public land for wildlife purposes when livestock are not in the pasture. Wildlife escape ladders would be installed in the drinkers.

The pipeline will meet or exceed the specifications for installation and construction:

PVC pipe and fittings shall conform to ASTM Standards D 1785, D 2241, D 2466, D 2467, D 2564, F 477 and AWWA Standard C 900. 2104, D 2239 and AWWA Standard C 901. Pipe shall have a standard inside diameter dimension ratio, SIDR and connections shall be made with insert fittings of nylon or PVC with stainless steel clamps. Valves shall have a minimum pressure rating (psi) and be the same size as the connecting pipeline unless otherwise specified, and shall conform to AWWA C 500, except shall be written for individual project or approved equal.

Installation shall be in accordance with ASTM D 2774. No pipe shall be installed in water. Full length of each section of pipe shall rest firmly on the bedding material and be pitched to drain. When a ripper and attachment is used: a minimum of one pass will be done to the required pipe depth plus 6 inches, prior to pipe placement. Ripping pass shall be in the same direction as the laying pass. The ripper trench shall be closed by having a tractor wheel or track run on each side to squeeze the sides together.

When trenching is the method used, trenches shall be excavated and backfilled in accordance with Section 02229: The 'V' type ditch depth limit shall be 18 inches. The bottom of the trenches shall be graded to provide uniform bearing support for the pipe. Plastic pipe laid in the ditch shall be snaked for a minimum 2 to 4 inch variance from the straight line not closer than every 20 ft or further apart than 40 ft. Valves and valve boxes shall be set plumb, with valve boxes centered directly over the valves and located outside the area of the roads and streets whenever possible. Ends of lines shall be capped leaving sufficient space for later removal. All connections shall be made in accordance with the drawings. Testing shall be in accordance with Section 01666 – Testing of Piping Systems.

B. Alternatives

1. No Action - Alternative 1

This alternative would leave the water supply as is. By not constructing this pipeline, the water supply in East Hasperos Pasture would remain unreliable.

2. Locate Elsewhere - Alternative 2

An alternate route for the proposed pipeline would require installation through undisturbed portions of private and public land. The impacts to the affected resources would be greater than those of the proposed route. This alternative will not be given further consideration in this report.

3. Lay the Pipeline on the Surface – Alternative 3

Laying the pipeline on the ground surface along the roadway would minimize surface disturbance and the loss of or disturbance to existing vegetation. Routine traffic on the existing road would result in damage to the pipeline requiring additional maintenance. Harsh winter climatic conditions may cause the pipeline to freeze increasing maintenance problems and shorten life expectancy. This alternative will not be given further consideration in this report.

III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS:

A. General Setting:

Juan Largo allotment #63036 is located in Lincoln County, approximately 45 miles northwest of Roswell, NM. It lies in the Canadian Plains Major Land Resource Area between 4,000 and 4,300 feet in elevation. The topography is gently sloping loamy plains. Annual precipitation for this region averages 13 - 14 inches.

The following critical elements are not present or affected by the proposed action:

Prime or Unique Farm Land
Cultural Resources
Native American Religious Concerns
Wastes, Hazardous/Solid
Wetland/Riparian Zones
Floodplains
Wild & Scenic Rivers
Wilderness
Low Income/Minority Populations
Areas of Critical Environmental Concern (ACEC):

The project falls within the Southeastern New Mexico Archaeological Region. This region contains the following cultural/temporal periods: Paleoindian (ca. 12,000-8,000 B.C.), Archaic (ca. 8000 B.C. –A.D. 950), Ceramic (ca. A.D. 600-1540) Protohistoric and Spanish Colonial (ca. A.D. 1400-1821), and Mexican and American Historical (ca. A.D. 1822 to early 20th century). Sites representing any or all of these periods are known to occur within the region. A more complete discussion can be found in *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico An Overview of*

Cultural Resources in the Roswell District, Bureau of Land Management published in 1989 by the U.S. Department of the Interior, Bureau of Land Management. A cultural resource inventory shall be conducted of the area of effect for the proposed project prior to any ground disturbing activities.

A cultural resource inventory was conducted for the area of effect (09-R-047-A), no Historic Properties were identified. No cultural resources will be affected.

B. Affected Resources and Environmental Consequences:

Air Quality:

BLM is required to comply with the Clean Air Act, as amended, and State Implementation Plans. The proposed area has not been identified as a non-attainment area. Additionally, throughout most of the year the air quality throughout Chaves County is very good and is considered clean. Air quality will be temporarily impacted only during the dry spring months, windstorms and blowing dust can become a problem throughout the area.

The area of the proposed action is considered a Class II air quality area. A Class II area allows moderate amounts air quality degradation. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

Environmental Consequences –

Air quality would temporary be directly impacted with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the project. Dust dissemination would discontinue upon completion of the construction phases of the project. Air pollution from the motorized equipment would discontinue at the completion of the project. The winds that frequent the southeastern part of New Mexico generally disperse the odors and emissions. The impacts to air quality would be greatly reduced as the construction of the project is completed. Other factors that currently affect air quality in the area include dust from livestock herding activities, dust from recreational use, and dust from use of roads for vehicular traffic.

There would be some impact to air resources in the short term resulting from construction activities. The construction activities would cause temporary increase in dust concentrations in construction areas. The use of standard construction dust mitigation procedures would help control emissions.

Soil: Soil in the Roswell Field Office was surveyed as a cooperative effort between the USDA Natural Resource Conservation Service (NRCS), the Bureau of Land Management (BLM) and the New Mexico Agricultural Experimental Station between 1956 and 1987. Detailed soil information is in the Soil Survey of Lincoln County, NM.

The ***Soil Survey of Lincoln County, New Mexico, (USDA Soil Conservation Service 1983)*** was used to describe and analyze impacts to soil from the proposed action. The soil map units represented in the project area are:

Darvey-Asparas association, 0 to 5 percent slopes (8) Runoff of Darvey soil is medium. Permeability is moderate. Hazard of water erosion is moderate. Hazard of soil blowing is high. Runoff of Asparas soil is medium. Permeability is moderately slow. Hazards of water erosion and soil blowing are moderate and high respectively.

Darvey-Pastura association, 0 to 8 percent slopes (9) Runoff of Darvey soil is medium. Permeability is moderate. Hazard of water erosion is moderate. Hazard of soil blowing is high. Runoff of Pastura soil is rapid. Permeability is moderate. Hazards of water erosion and soil blowing are high respectively.

Deama-Pastura association, 0 to 15 percent slopes (13) Runoff of Deama soil is rapid. Permeability is moderate. Hazard of water erosion is high. Hazard of soil blowing is slight. Runoff of Pastura soil is rapid. Permeability is moderate. Hazards of water erosion and soil blowing are high respectively.

Environmental Consequences

The construction of the project would physically disturb topsoil and would expose the substratum soil. Direct impacts resulting from the construction of the project include removal of vegetation, exposure of the soil, mixing of horizons, compaction, loss of top soil productivity and susceptibility to wind and water erosion. Wind erosion would be expected to be a minor contributor to soil erosion with the possible exception of dust from vehicle traffic. These impacts could result in increased indirect impacts such as runoff, erosion and off-site sedimentation.

Mitigation

The disturbed area should naturally re-vegetate within two growing seasons or less with adequate precipitation, resulting in cessation of project related erosion or runoff.

Watershed – Hydrology

Watershed and hydrology in the area is affected by land and water use practices. The degree to which hydrologic processes are affected by land and water use depends on location, extent, timing and type of activity. Factors that currently cause short-lived alterations to the hydrologic regime include livestock grazing management, recreational use activities, groundwater pumping and also oil and gas developments such as well pads, permanent and temporary roads, pipelines and power lines.

Environmental Consequences

Watershed - Hydrology

Construction and surface disturbance activities from construction of the project can result in long and short-term alterations to hydrologic regime. Peak and low flow of perennial streams, ephemeral, and intermittent rivers and streams would be directly affected by an increase in impervious surfaces resulting from construction of this pipeline. Potential hydrologic effects to peak flow is reduced infiltration where surface flows can move more quickly to perennial or ephemeral rivers and streams, causing peak flow to occur earlier and be larger. Increased magnitude and volume of peak flow can cause bank erosion, channel widening, downward incision, and disconnection from the floodplain. Potential hydrologic effects to low flow is reduced surface storage and groundwater recharge, resulting in reduced baseflow to perennial, ephemeral, and intermittent rivers and streams. Direct impacts would be that hydrologic processes may be altered where perennial, ephemeral, and intermittent river and stream systems respond by changing physical parameters, such as channel configuration. These changes may in turn impact chemical parameters and ultimately the aquatic ecosystem.

Long-term direct and indirect impacts to watershed and hydrology would continue for the life of the project and would decrease once natural re-vegetation of the project has taken place. Short-term direct and indirect impacts to the watershed and hydrology from pipelines that are not buried with material would occur and would likely decrease in time due to natural re-vegetation. The disturbed area should naturally re-vegetate within two growing seasons or less with adequate precipitation.

Vegetation: Grassland Plant Community

Vegetation within the proposed pipeline area is best described as a Grassland Plant Community. These descriptions were developed and described in the Roswell Resource Management Plan, October, 10, 1997. Further information on those communities can be found in the Draft RMP, Appendix 11.

The historic plant community associated with this shallow and shallow/limestone ecological site is a Grassland-mix where mid-grasses are co-dominant with shrubs. Black grama *(Bouteloua eriopoda)*, sideoats grama *(Bouteloua curtipendula),* blue grama (*Bouteloua gracilis),* vine mesquite *(Panicum obtusum)* and mesa dropseed *(Sporobolus flexuosus)* are the dominant grasses. Other common grasses throughout loamy and shallow sites include tobosa *(Pleuraphis mutica)*, threeawn *(Aristida* spp.), New Mexico feathergrass *(Stipa neomexicana)* and burrograss *(Scleropogon brevifolius).* Cholla *(Opuntia spinosa)* is the dominant shrub. Other shrubs that occur on this site include yucca *(Yucca* spp.), mesquite *(Prosopis glandulosa),* and broom snakeweed *(Gutierrezia sarothrae).* Forbs fluctuate from year to year being the most

abundant in years of early spring moisture. Bladderpod *(Lesquerella* spp.), globemallow *(Sphaeralcea* spp.) and croton *(Croton* spp.) are a few of the common forbs.

Ecological Sites found within this project area are CP-3-Shallow, Loamy and Shallow Limestone as described by the NRCS. The ecological site descriptions and soil information for this area may be found on website www.nm.nrcs.usda.gov/technical/fotg/section-2/esd/cp2.html.

Environmental Consequences

Vegetation disturbance would be localized to the immediate area of the project. A small amount of vegetation would be destroyed where the trench runs alongside this route. The disturbed area should naturally re-vegetate within two growing seasons or less with adequate precipitation. Less than four acres of vegetation would be subject to disturbance during the construction of the pipeline, (based on the estimate of 2.2 miles * 5 ft. width).

Non-Native and Invasive Species:

Noxious and Invasive species: A noxious weed is defined as a plant that causes disease or has other adverse effects on the human environment and is, therefore, detrimental to the public health and to the agriculture and commerce of the United States. Generally, noxious weeds are aggressive, difficult to manage, parasitic, are carriers or hosts of harmful insects or disease, and are either native, new to, or not common in, the United States. In most cases, however, noxious weeds are non-native species.

The list currently includes the following weeds: 1) African rue *(Peganum harmala)*, 2) black henbane *(Hyoscyamus niger)*, 3) bull thistle *(Cirsium vulgare),* 4) camelthorn *(Alhagi pseudalhagi),* 5) Canada thistle *(Cirsium arvense),* 6) dalmatian toadflax *(Linaria genistifolia ssp. Dalmatica)*, 7) goldenrod, *(Solidago Canadensis)* 8) leafy spurge *(Euphorbia esula),* 9) Malta starthistle *(Centaurea melitensis),* 10) musk thistle *(Carduus nutans),* 11) poison hemlock *(Conium maculatum),* 12) purple starthistle *(Centaurea calcitrapa),* 13) Russian knapweed *(Centaurea repens),* 14) Scotch thistle *(Onopordum acanthium),* 15) spotted knapweed *(Centaurea maculosa),* 16) teasel *(Dipsacus fullonum)*, 17) yellow starthistle *(Centaurea solstitialis),* 18) yellow toadflax *(Linaria vulgaris),* 19) Russian olive *(Elaeagnus angustifolia),* 20) Saltcedar *(Tamarix* spp.*),* 21) Siberian elm *(Ulmus pumila).*

Of the noxious weeds listed, the ones with known populations in the Roswell District are African rue, non-native thistles *(Cirsium* spp.) such as bull thistle and Canada thistle, leafy spurge, poison hemlock, teasel, musk thistle, goldenrod, Malta starthistle, Russian knapweed, tamarix species, Siberian elm, Russian olive and Scotch thistle. Also "problem weeds" of local concern are cocklebur *(Xanthium* spp.*)*, buffalobur *(Curcurbita foetidissima)* and spiny cocklebur *(Xanthium spinosum)*. "Problem weeds" are those

weeds which may be native to the area but whose populations are out of balance with other local flora.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Further, noxious weeds can negatively affect livestock and dairy producers by increasing their feed and animal health care costs. Increased costs to operators are eventually borne by consumers. Noxious weeds also affect recreational uses, and reduce realty values of both directly influenced and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs using funds generated from the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

There are no known noxious or invasive species populations within the boundaries of allotment #63036.

Environmental Consequences

There is an opportunity for noxious weeds to become established within the proposed pipeline route. Monitoring the area after installation will be conducted to ensure that weeds do not become established. If new weed populations are discovered, they will be aggressively treated.

Water Quality:

Surface:
Surface water within the area is affected by geology, precipitation and water erosion. Factors that currently affect surface water resources include livestock grazing management, recreational use and brush control treatments. Ephemeral surface water within the area may be located in tributaries, playas, alkali lakes and stock tanks. No perennial surface water is found on public land in this area.

Ground:
Groundwater within this area is affected by geology and precipitation. Factors that currently affect groundwater resources in this area include livestock grazing management, groundwater pumping and possible impacts from brush control treatments. The approximate depth to groundwater ranges from 430 to 485 feet in the area (New Mexico Office of the State Engineer data).

Environmental Consequences

Water Quality: Surface and Groundwater

Surface disturbance from construction of this project can result in degradation of surface water quality and groundwater quality from non-point source pollution, increased soil

losses, and increased gully erosion.

Potential direct impacts that would occur due to construction of the project include increased surface water runoff and off-site sedimentation brought about by soil disturbance and increased salt loading and water quality impairment of surface waters. The magnitude of these impacts to water resources would depend on the proximity of the disturbance to the drainage channel, slope aspect and gradient, degree and area of soil disturbance, soil character, duration and time within which construction activity would occur, and the timely implementation and success or failure of mitigation measures.

Direct impacts would likely be greatest shortly after the start of construction activities and would likely decrease in time due to natural stabilization, and reclamation efforts. Construction activities would occur over a relatively short period; therefore, the majority of the disturbance would be intense but short lived. Direct impacts to surface water quality would be minor, short-term impacts which may occur during storm flow events. Indirect impacts to water-quality related resources, such as fisheries, would not occur.

Authorization of the proposed projects would require full compliance with BLM directives and stipulations that relate to surface and groundwater protection.

Visual Resources:

The resource area contains one Visual Resource Management Area (VRM) Class IV. Class IV. Areas allow that contrasts to the basic elements caused by a management activity may be evident and begin to attract attention in the landscape. Changes, however, should remain subordinate in the existing landscape. Treatment sites along highway rights-of way are categorized as Visual Class IV. These areas will be visible to the public.

Environmental Consequences:

There would be a short-term change in the color and texture along this pipeline route.

Recreation:

Dispersed recreational opportunities exist within this area but access to public land is not limited. Dispersed recreational activities may include hunting, caving, sightseeing, bird watching, primitive camping, mountain biking, horseback riding and hiking. Off Highway Vehicle designation for public land within this area is classified as "Limited" to existing roads and trails. Recreation activities would not be adversely affected by the proposed action.

Environmental Consequences:

This project would have little or no affect on recreational opportunities within this area. Large blocks of public land would allow recreationists to use public land and avoid the immediate vicinity within this area thus minimizing environmental impacts.

Cave/Karst:

A complete inventory of significant cave or karst features has been completed for public land located in this grazing allotment. At the present time, Torgac Cave has been identified within this allotment. If at a later date, more significant caves or karst features are found on public land within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental Analysis would be prepared to construct this exclosure fence.

This allotment is located within a designated area of High Karst or Cave Potential.

Environmental Consequences:

While the proposed action is located in (*High Potential Karst Area*), no surface cave/karst features were observed in the immediate vicinity of the proposed action.

Wildlife:

The area provides habitat for numerous large and small animals, birds, rodents, and a sustainable population of mule deer *(Odocoileus hemionus)* and pronghorn *(Antilocapra americana).*

Other game species occurring with the area include mourning dove *(Zenáida macroúra)* and scaled quail *(Callipepla squamata).* Raptors that utilize the area on a more seasonal basis include the Swainson's red-tailed *(Búteo swainsoni),* and ferruginous hawks *(Búteo regális),* American kestrel *(Fálco sparvérius),* and great-horned owl *(Búbo virginiánus)*. Numerous passerine birds utilize the grassland areas. The most common include the western meadowlark *(Sturnélla neglécta),* mockingbird *(Mímus polyglóttos),* horned lark *(Eremóphila alpéstris),* kill deer *(Charádrius vocíferous),* loggerhead shrike *(Lánius ludoviciánus),* and vesper sparrow *(Poocétes gramíneus).*

The warm prairie environment supports a large number of reptile species compared to higher elevations. The more common reptiles include the short-horned lizard *(Phrynosoma douglassi),* lesser earless lizard *(Holbrookia maculata),* eastern fence lizard *(Scleroporus undulatus),* coachwhip *(Masticophis flagellum),* bullsnake *(Pituophis m. sayi)*, prairie rattlesnake *(Crolatus v. viridis),* and western rattlesnake *(Crolatus viridis).*

A general description of wildlife occupying or potentially utilizing the proposed action area is located in the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1994).

Environmental Consequences:

There will be short-term disruptions to wildlife during the installation phase. Long-term benefits wildlife species should result from a more reliable water source in East Hasperos Pasture.

Threatened and Endangered Species:

A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). An update concerning the following species is provided in light of de-listing actions conducted by the USFWS and current species status.

The bald eagle (*Haliaéetus leucocéphalus*) was recently de-listed by the USFWS but continues to be monitored. This species remains a BLM sensitive species.

The Northern Aplomado falcon (*Fálco femorális septentrionalis*) remains listed as Endangered by the USFWS. Areas have been established as non-essential experimental populations of Northern Aplomado falcon in southern New Mexico and Arizona. Key habitat areas do occur in Lincoln County and are characterized by desert grasslands supporting mature and tall yucca as nesting habitat. These habitats are mostly located in the Tularosa Basin area.

The swift fox *(Vulpes velox)* is no longer listed as a Federal Candidate species since the preparation of the Biological Opinion (AP11-38) in the Roswell RMP that provided a detailed description of the range, habitats and potential threats.

Environmental Consequences:

There will be short-term disruptions to T & E species during the installation phase. Long-term benefits for some of the wildlife species should result from a more reliable water source in East Hasperos Pasture.

Livestock Grazing:

Juan Largo allotment #63036 is operated as cow/calf ranch on a year-long basis. Livestock are rotated through pastures which provide some grazing deferment during each year.

Environmental Consequences –

Beneficial impacts to livestock would occur due to a more reliable water source and better distribution. No changes in livestock numbers would occur.

Mineral and Oil and Gas development:

There are existing leases/permits for mineral materials and oil and gas throughout this area.

Environmental Consequences

No impacts are anticipated with the mineral developments in the project area.

Land, Realty and Rights-of-Way:

Rights-of-Way for pipelines, power lines, communication sites and access routes are permitted within the Roswell Field Office area.

Environmental Consequences:

To avoid unforeseen impacts to the oil and gas industry and to allow for safety, all oil and gas operators and right-of-way holders will be contacted prior the start of construction.

CUMULATIVE IMPACTS

A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

Analysis of cumulative impacts is driven by major resource issues. The action considered in this environmental assessment (EA) is the installation of a water pipeline on allotment #63036.

Roads, fences, stock trails and water well development have occurred in the past and may contribute to the cumulative impacts of the area. This is in addition to oil and gas field development in the area. The proposed action will not contribute significantly to the cumulative impacts to the area.

C. DESCRIPTION OF MITIGATION MEASURES AND RESIDUAL IMPACTS:

Mitigation Incorporated into the Proposed Action: A linear area of disturbance from the pipeline will remain on the landscape. This feature will not stand out significantly on the landscape due to the fact that it will be installed along an existing roadway and natural re-vegetation of the trench will occur.

The following mitigation measures will be necessary to ensure project construction as outlined in this document:

1. To minimize erosion, water bars to turn run-off water away from the pipeline will be required every 100 feet in areas with slopes of 10 percent or greater.

2. No blading will occur on public land, unless authorized by the Roswell Resource Area Manager.

3. Water will be provided yearlong to all drinking tubs located on public land, for wildlife purposes, when livestock are not in the pasture. Wildlife escape ladders will be installed in all drinkers.

4. Livestock drinking tubs will not exceed 18" in height.

5. The co-operator/contractor shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the co-operator/contractor. The co-operator/contractor shall take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

6. Vegetation, soil, and rocks left as a result of construction or maintenance activity shall be randomly scattered over the project area and shall not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. A berm shall be left over the ditch line to allow for settling back to grade.

7. The co-operator/contractor shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public land under this authorization.

8. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the co-operator/contractor or any person working on the co-operator/contractor's behalf, on public or Federal land shall be immediately reported to the authorized officer. The co-operator/contractor shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The co-operator/contractor shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the co-

operator/contractor.

9. The co-operator/contractor is hereby obligated to comply with procedures established in the Native American Grave Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of the implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes.

10. The co-operator/contractor shall be responsible for maintaining the site in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

11. The approval of the Permit/Agreement does not convey the right to prevent other lawful uses from occurring. The applicant/cooperator understands that other lawful users with proper authorizations.

12. To avoid impacts to the oil and gas industry and to allow for safety, all oil and gas operators and right-of-way holders will be contacted prior the start of construction.

IV. Public Land Health

Public Land (Rangeland) Health assessments have been completed on this allotment in 2009.

IV. Socio-Economic Factors

Neither the proposed action nor the No action Alternative as outlined in this document are anticipated to alter the socio-economic conditions for either the permittee or Lincoln County.

VI. PERSONS CONSULTED:

Roswell Field Office:
Russell Fox, Support Services
Cindy Dreps, Support Services
Joseph Navarro, Rangeland Management Specialist
Kyle Arnold, Rangeland Management Specialist

Dan Baggao, Wildlife Biologist
Randy Howard, Wildlife Biologist
Michael McGee, Hydrologist
Scott Sanderford, Realty Specialist
Richard Hill, Environmental Protection Specialist
John Simitz, Petroleum Engineer
Howard Parman, Planning and Environmental Coordinator
Bill Murry, Outdoor Recreation Planner
Pat Flanary, Archaeologist
Rebecca L. Hill, Archaeologist
L.H. Hutcheson, Allote

STIPULATIONS

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